

COMPLETE LISTING OF THE CLAIMS

The following lists all of the claims that are or were in the above-identified patent application. The status identifiers respectively provided in parentheses following the claim numbers indicate the current statuses of the claims.

1. (Previously Presented) A device comprising:

a sub-mount containing conductive traces exposed at a first surface of the sub-mount;

a die mounted on the sub-mount and containing an edge-emitting laser that is electrically coupled to the conductive traces; and

a reflector positioned to reflect an optical signal from the edge-emitting laser through the first surface and through the sub-mount.

2. (Original) The device of claim 1, further comprising an alignment post attached to the sub-mount where the optical signal emerges from the sub-mount.

3. (Previously Presented) The device of claim 1, further comprising a lens in the path of the optical signal.

4. (Original) The device of claim 3, wherein the lens is integrated in the sub-mount along the path of the optical signal.

5. (Original) The device of claim 3, wherein the lens comprises a diffractive optical element.

6. (Original) The device of claim 1, wherein the reflector comprises a portion of an inner wall of a cavity in a cap overlying the die.

7. (Original) The device of claim 6, wherein the cap attaches to the sub-mount to hermetically seal the die in the cavity.

8. (Original) The device of claim 1, further comprising a transparent encapsulant attached to the sub-mount and encasing the die.

9. (Original) The device of claim 8, wherein the encapsulant comprises silicone.

10. (Previously Presented) A process comprising:

mounting a die containing a laser on a surface of a sub-mount;
electrically connecting the laser to electrical traces in the sub-mount; and
attaching a reflector to the sub-mount in a position such that an optical signal from the laser is reflected through the sub-mount.

11. (Original) The process of claim 10, further comprising attaching an alignment post to the sub-mount where the optical signal emerges.

12. (Original) The process of claim 10, further comprising encapsulating the laser in a transparent material that protects the laser.

13. (Original) The process of claim 12, wherein the transparent material comprises silicone.

14. (Original) The process of claim 10, wherein the laser is an edge-emitting laser.

15. (Original) The process of claim 10, wherein electrically connecting the laser comprises connecting a plurality of lasers to a sub-mount wafer that includes the sub-mount.

16. (Original) The process of claim 15, further comprising cutting the sub-mount wafer to separate the sub-mount from similar sub-mounts.

17. (Previously Presented) The process of claim 10, wherein the reflector reflects the optical signal through the surface on which the die is mounted.

18. (Previously Presented) The device of claim 1, wherein the die is mounted on the first surface of the sub-mount.

19. (Previously Presented) The device of claim 18, further comprising an alignment post attached to a second surface of the sub-mount where the optical signal emerges from the sub-mount.

20. (Previously Presented) The device of claim 1, wherein the first surface is substantially planar.